

RRRRRRRRRRRR		UUU		UUU	NNN	NNN	000000000		FFFFFFFFFFFFFF	FFFFFFFFFFFFFF
RRRRRRRRRRRR		UUU		UUU	NNN	NNN	000000000		FFFFFFFFFFFFFF	FFFFFFFFFFFFFF
RRRRRRRRRRRR		UUU		UUU	NNN	NNN	000000000		FFFFFFFFFFFFFF	FFFFFFFFFFFFFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNNNNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNNNNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNNNNN	NNN	000	000	FFF	FFF
RRRRRRRRRRRR		UUU		UUU	NNN	NNN	000	000	FFFFFFFFFFFFFF	FFFFFFFFFFFFFF
RRRRRRRRRRRR		UUU		UUU	NNN	NNN	000	000	FFFFFFFFFFFFFF	FFFFFFFFFFFFFF
RRRRRRRRRRRR		UUU		UUU	NNN	NNN	000	000	FFFFFFFFFFFFFF	FFFFFFFFFFFFFF
RRR	RRR	UUU		UUU	NNN	NNNNNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNNNNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNNNNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUU		UUU	NNN	NNN	000	000	FFF	FFF
RRR	RRR	UUUUUUUUUUUUUUUU		UUUUUUUUUUUUUUUU	NNN	NNN	000000000		FFF	FFF
RRR	RRR	UUUUUUUUUUUUUUUU		UUUUUUUUUUUUUUUU	NNN	NNN	000000000		FFF	FFF
RRR	RRR	UUUUUUUUUUUUUUUU		UUUUUUUUUUUUUUUU	NNN	NNN	000000000		FFF	FFF

.....

```

LL          IIIIII          SSSSSSSS
LL          IIIIII          SSSSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SSSSSS
LL          II             SSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LLLLLLLLLLLL IIIIII          SSSSSSSS
LLLLLLLLLLLL IIIIII          SSSSSSSS

```



```
1 0001 0 MODULE getqs ( IDENT = 'V04-000'
2 P 0002 0 %BLISS32C, ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE,
3 0003 0 NONEXTERNAL = LONG_RELATIVE)
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1 *****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1 ++
30 0030 1
31 0031 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
32 0032 1
33 0033 1 ABSTRACT: Isolates a string delimited by '' or '''.
34 0034 1
35 0035 1 ENVIRONMENT: Transportable
36 0036 1
37 0037 1 AUTHOR: R.W.Friday CREATION DATE: May, 1978
38 0038 1
39 0039 1
```

GETQS
V04-000

Revision History

K 5
16-Sep-1984 00:41:08
14-Sep-1984 13:06:34

VAX-11 Bliss-32 V4.0-742
DISK\$VMMASTER:[RUNOFF.SRC]GETQS.BLI;1 Page 2 (2)

:	41	0040	1	%SBTTL 'Revision History'
:	42	0041	1	
:	43	0042	1	MODIFIED BY:
:	44	0043	1	
:	45	0044	1	003 RER00003 Ron Randall 07-Mar-1983
:	46	0045	1	Global edit of all modules. Updated module names, idents,
:	47	0046	1	copyright dates. Changed require files to BLISS library.
:	48	0047	1	
:	49	0048	1	--
:	50	0049	1	

GETQS
V04-000

Module Level Declarations

L 5
16-Sep-1984 00:41:08
14-Sep-1984 13:06:34

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[RUNOFF.SRC]GETQS.BLI;1 Page 3 (3)

```
: 52      0050 1 %SBTTL 'Module Level Declarations'
: 53      0051 1
: 54      0052 1
: 55      0053 1  TABLE OF CONTENTS:
: 56      0054 1
: 57      0055 1  INCLUDE FILES:
: 58      0056 1
: 59      0057 1  LIBRARY 'NXPORT:XPORT';
: 60      0058 1  REQUIRE 'REQ:RNODEF';
: 61      0189 1
: 62      U 0190 1  %IF DSRPLUS %THEN
: 63      U 0191 1  LIBRARY 'REQ:DPLLIB';
: 64      0192 1  %ELSE
: 65      0193 1  LIBRARY 'REQ:DSRLIB';
: 66      0194 1  %FI
: 67      0195 1
: 68      0196 1
: 69      0197 1  EXTERNAL REFERENCES:
: 70      0198 1
: 71      0199 1  EXTERNAL LITERAL
: 72      0200 1  RINTES : UNSIGNED (8);
: 73      0201 1
: 74      0202 1  EXTERNAL
: 75      0203 1  IRA : FIXED_STRING,
: 76      0204 1  KHAR;
: 77      0205 1
```

```
! XPORT Library
! RUNOFF variant definitions
```

```
! DSRPLUS BLISS Library
```

```
! DSR BLISS Library
```

GETQS
V04-000

Module Level Declarations

M 5
16-Sep-1984 00:41:08
14-Sep-1984 13:06:34

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[RUNOFF.SRC]GETQS.BLI;1 Page 4 (4)

```

79 0206 1 GLOBAL ROUTINE GETQS (OUTPUT) =
80 0207 1
81 0208 1 ++
82 0209 1 FUNCTIONAL DESCRIPTION:
83 0210 1
84 0211 1 GETQS expects the next input character to be either a '"'
85 0212 1 or a '""'. It collects all characters up through the
86 0213 1 matching '"' or '""' and returns them in OUTPUT.
87 0214 1
88 0215 1 FORMAL PARAMETERS:
89 0216 1
90 0217 1 The results are returned in OUTPUT.
91 0218 1
92 0219 1 IMPLICIT INPUTS: None
93 0220 1
94 0221 1 IMPLICIT OUTPUTS: None
95 0222 1
96 0223 1 ROUTINE VALUE:
97 0224 1 COMPLETION CODES:
98 0225 1
99 0226 1 See GETQSC.REQ for a list of completion codes.
100 0227 1
101 0228 1 SIDE EFFECTS: None
102 0229 1 --
103 0230 1
104 0231 2 BEGIN
105 0232 2 LOCAL
106 0233 2 TERMINATOR;
107 0234 2
108 0235 2 MAP
109 0236 2 OUTPUT : REF FIXED_STRING;
110 0237 2
111 0238 2 IF .KHAR EQL RINTES
112 0239 2 THEN !Nothing on line.
113 0240 2 RETURN GETQS_NONE;
114 0241 2
115 0242 3 TERMINATOR = (SELECTONE .KHAR OF
116 0243 3 SET
117 0244 3 [%C'''' %C''] : .KHAR;
118 0245 3 [OTHERWISE] : RETURN GETQS_NONE;
119 0246 2 TES);
120 0247 2
121 0248 2 FS_INIT (OUTPUT);
122 0249 2 KCNS (); !Skip over the initial delimiter.
123 0250 2
124 0251 2 WHILE .KHAR NEQ RINTES
125 0252 2 AND .KHAR NEQ .TERMINATOR DO
126 0253 2 BEGIN
127 0254 3
128 0255 3 IF .FS_LENGTH (OUTPUT) EQL .FS_MAXSIZE (OUTPUT)
129 0256 3 THEN !Skip extra characters.
130 0257 4 BEGIN
131 0258 4
132 0259 4 WHILE .KHAR NEQ RINTES
133 0260 4 AND (.KHAR NEQ .TERMINATOR) DO
134 0261 4 KCNS ();
135 0262 4
```


GETQS
V04-000

Module Level Declarations

N 5
16-Sep-1984 00:41:08
14-Sep-1984 13:06:34

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[RUNOFF.SRC]GETQS.BLI;1 Page 5 (4)

```

136 0263 4      IF .KHAR EQL .TERMINATOR
137 0264 4      THEN
138 0265 4      KCNS ();
139 0266 4
140 0267 4      RETURN GETQS_TOO_LONG;
141 0268 4      END;
142 0269 4
143 0270 4      FS WCHAR (OUTPUT, .KHAR);
144 0271 4      KCNS ();
145 0272 4      END;
146 0273 4
147 0274 4      IF .KHAR NEQ RINTES
148 0275 4      THEN
149 0276 4      KCNS ()
150 0277 4      ELSE
151 0278 4      RETURN GETQS_BAD;
152 0279 4
153 0280 4      !Reset pointer to start of result, so user can do a simple
154 0281 4      !series of fs_rchar's to process it.
155 0282 4      FS_NEXT (OUTPUT) = .FS_START (OUTPUT);
156 0283 4      RETURN GETQS_NORMAL
157 0284 1      END;
```

!Get next character.

!Skip delimiter, unless it's end of record.

!Trailing terminator missing.

!End of GETQS

.TITLE GETQS
.IDENT \V04-000\

.EXTRN RINTES, IRA, KHAR

.PSECT \$CODE\$,NOWRT,2

.ENTRY GETQS, Save R2,R3,R4

54	00G	8F	9A	00002	MOVZBL	#RINTES, R4	0206
53	00000000G	EF	9E	00006	MOVAB	KHAR, R3	
52	00000000G	EF	9E	0000D	MOVAB	IRA+12, R2	
50		63	D0	00014	MOVL	KHAR, R0	0238
54		50	D1	00017	CMPL	R0, R4	
		0A	13	0001A	BEQL	1\$	
22		50	D1	0001C	CMPL	R0, #34	0244
		09	13	0001F	BEQL	2\$	
27		50	D1	00021	CMPL	R0, #39	
		04	13	00024	BEQL	2\$	
50		03	D0	00026	MOVL	#3, R0	0245
			04	00029	RET		
51	04	AC	D0	0002A	MOVL	OUTPUT, R1	0248
	0C	A1	D4	0002E	CLRL	12(R1)	
61	10	A1	9E	00031	MOVAB	16(R1), (R1)	
04	A1	61	D0	00035	MOVL	(R1), 4(R1)	
		63	11	00039	BRB	11\$	0249
63	F8	B2	9A	0003B	MOVZBL	@IRA+4, KHAR	
	F8	A2	D6	0003F	INCL	IRA+4	
		62	D7	00042	DECL	IRA+12	
54		63	D1	00044	CMPL	KHAR, R4	0251
		61	13	00047	BEQL	12\$	
50		63	D1	00049	CMPL	KHAR, TERMINATOR	0252
		5C	13	0004C	BEQL	12\$	
08	A1	0C	A1	D1	CMPL	12(R1), 8(R1)	0255

		3F	12	00053		BNEQ	10\$		
54		63	D1	00055	5\$:	CMPL	KHAR, R4		0259
		1C	13	00058		BEQL	7\$		
50		63	D1	0005A		CMPL	KHAR, TERMINATOR		0260
		17	13	0005D		BEQL	7\$		
		62	D5	0005F		TSTL	IRA+12		0261
		08	14	00061		BGTR	6\$		
63		54	9A	00063		MOVZBL	R4, KHAR		
62		01	CE	00066		MNEGL	#1, IRA+12		
		EA	11	00069		BRB	5\$		
63	F8	B2	9A	0006B	6\$:	MOVZBL	@IRA+4, KHAR		
	F8	A2	D6	0006F		INCL	IRA+4		
		62	D7	00072		DECL	IRA+12		
		DF	11	00074		BRB	5\$		
50		63	D1	00076	7\$:	CMPL	KHAR, TERMINATOR		0263
		15	12	00079		BNEQ	9\$		
		62	D5	0007B		TSTL	IRA+12		0265
		08	14	0007D		BGTR	8\$		
63		54	9A	0007F		MOVZBL	R4, KHAR		
62		01	CE	00082		MNEGL	#1, IRA+12		
		09	11	00085		BRB	9\$		
63	F8	B2	9A	00087	8\$:	MOVZBL	@IRA+4, KHAR		
	F8	A2	D6	0008B		INCL	IRA+4		
		62	D7	0008E		DECL	IRA+12		
50		02	D0	00090	9\$:	MOVL	#2, R0		0267
			04	00093		RET			
04	B1	63	90	00094	10\$:	MOVB	KHAR, @4(R1)		0270
		A1	D6	00098		INCL	4(R1)		
	04	A1	D6	0009B		INCL	12(R1)		
	0C	62	D5	0009E	11\$:	TSTL	IRA+12		0271
		99	14	000A0		BGTR	3\$		
63		54	9A	000A2		MOVZBL	R4, KHAR		
62		01	CE	000A5		MNEGL	#1, IRA+12		
		9A	11	000A8		BRB	4\$		
54		63	D1	000AA	12\$:	CMPL	KHAR, R4		0274
		17	13	000AD		BEQL	14\$		
		62	D5	000AF		TSTL	IRA+12		0276
		08	14	000B1		BGTR	13\$		
63		54	9A	000B3		MOVZBL	R4, KHAR		
62		01	CE	000B6		MNEGL	#1, IRA+12		
		0F	11	000B9		BRB	15\$		
63	F8	B2	9A	000BB	13\$:	MOVZBL	@IRA+4, KHAR		
	F8	A2	D6	000BF		INCL	IRA+4		
		62	D7	000C2		DECL	IRA+12		
		04	11	000C4		BRB	15\$		
50		01	D0	000C6	14\$:	MOVL	#1, R0		0278
			04	000C9		RET			
04	A1	61	D0	000CA	15\$:	MOVL	(R1), 4(R1)		0282
		50	D4	000CE		CLRL	R0		0283
			04	000D0		RET			0284

; Routine Size: 209 bytes, Routine Base: \$CODE\$ + 0000

: 158 0285 1
: 159 0286 1 END
: 160 0287 0 ELUDOM

!End of module

PSECT SUMMARY

```
:
:      Name                Bytes                Attributes
: $CODE$                  209 NOVEC,NOWRT, RD ,  EXE,NOSHR, LCL, REL,  CON,NOPI,ALIGN(2)
```

Library Statistics

```
:
:      File                ----- Symbols -----      Pages      Processing
:                               Total   Loaded   Percent   Mapped      Time
: $255$DUA28:[SYSLIB]XPORT.L32;1      590         0         0       252      00:00.1
: $255$DUA28:[RUNOFF.SRC]DSRLIB.L32;1 1248        17         1       86       00:00.3
```

COMMAND QUALIFIERS

```
:
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:GETQS/OBJ=OBJ$:GETQS MSRC$:GETQS/UPDATE=(ENH$:GETQS)
```

```
: Size:          209 code + 0 data bytes
: Run Time:      00:05.9
: Elapsed Time:  00:14.8
: Lines/CPU Min: 2898
: Lexemes/CPU-Min: 19767
: Memory Used:   77 pages
: Compilation Complete
```


0342 AH-BT13A-SE
VAX/VMS V4.0

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